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**Q**uestions & Answers

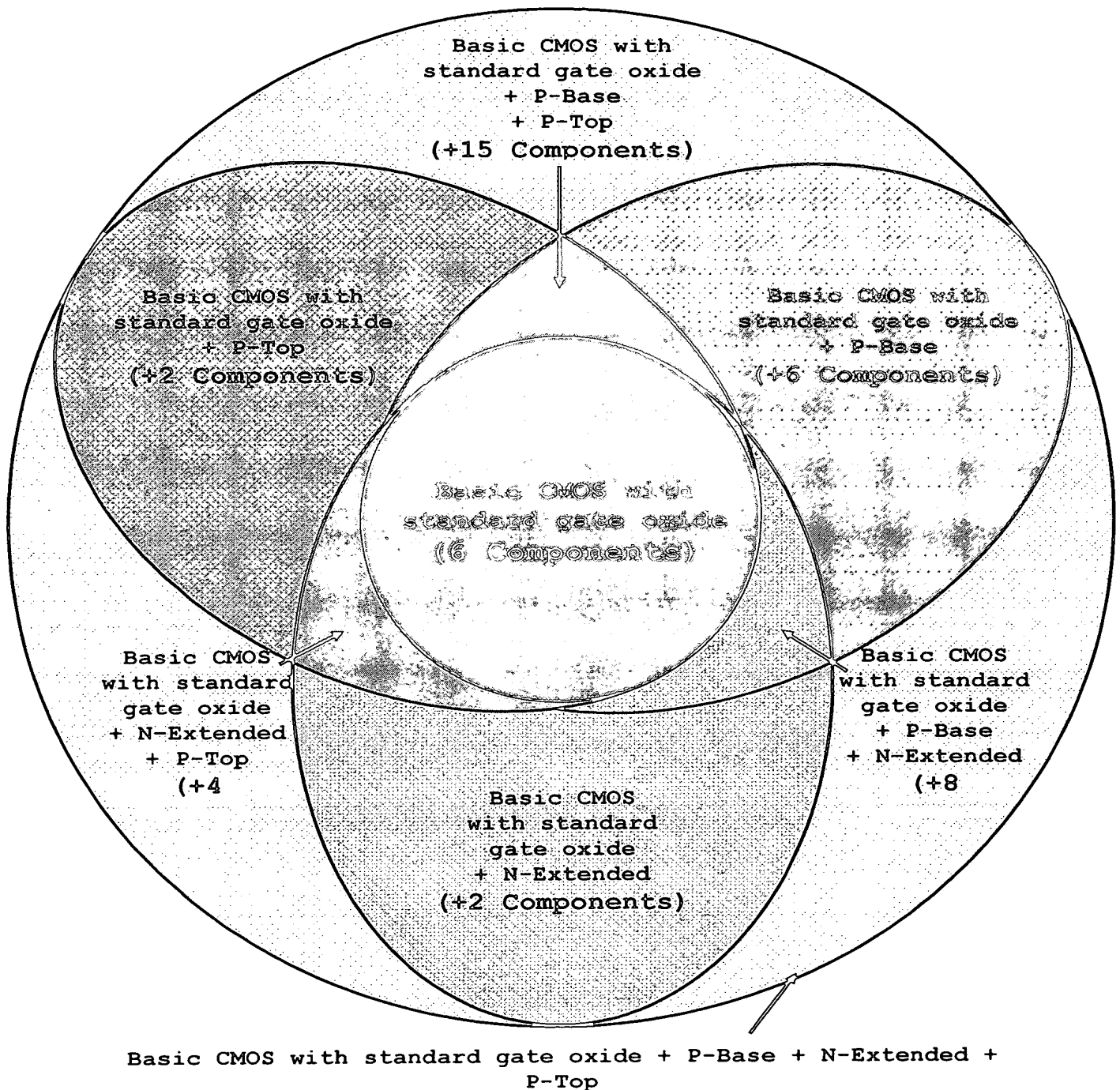


Figure 3

Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
	Diffusion
Mask 2: Active Area	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
	Photo
	Nitride Etch
Mask 3: P-Field	Photo
	P-Type Implant (P-Field)
	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
Mask 5: Thin Gate oxide & VTP Adjust	Oxide Etch
	Oxidation (Pre-Gate Oxide)
	Oxide Etch
	Oxidation (Thin Gate Oxide)
	Photo
Mask 6: Polysilicon Gate Patterning	P-Type Implant (VTP Adjust)
	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
	Polysilicon Etch
Mask 8: N-Extended	Photo
Mask 10: N+ Implant	N-Type Implant (N-Extended)
	Oxidation and Diffusion
	Polysilicon Oxidation
	Photo
	N-Type Implant (N+)
Mask 11: P+ Implant	Photo
	P-Type Implant (P+)
	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
Mask 12: Contacts	Contact Etch
	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 13: Metal 1	Dielectric and SOG (Oxide) Deposition
	Photo
	Vias Etch
	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
Mask 14: Vias	Photo
	Metal Etch
	Oxide / Nitride Deposition
	Photo
	Oxide Etch
Mask 15: Metal 2	
Mask 16: Passivation	

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Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
Mask 2: Active Area	Diffusion
	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
Mask 3: P-Field	Photo
	Nitride Etch
	P-Type Implant (P-Field)
	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
	Oxide Etch
	Oxidation (Pre-Gate Oxide)
Mask 5: Thin Gate oxide & VTP Adjust	Oxide Etch
	Oxidation (Thin Gate Oxide)
	Photo
	P-Type Implant (VTP Adjust)
Mask 6: Polysilicon Gate Patterning	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
	Polysilicon Etch
Mask 9: P-Top	Photo
Mask 10: N+ Implant	P-Type Implant (P-Top)
	Oxidation and Diffusion
	Polysilicon Oxidation
	Photo
Mask 11: P+ Implant	N-Type Implant (N+)
	Photo
Mask 12: Contacts	P-Type Implant (P+)
	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
Mask 13: Metal 1	Contact Etch
	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 14: Vias	Dielectric and SOG (Oxide) Deposition
	Photo
	Vias Etch
Mask 15: Metal 2	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 16: Passivation	Oxide / Nitride Deposition
	Photo
	Oxide Etch





Figure 7

Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
	Diffusion
Mask 2: Active Area	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
	Photo
	Nitride Etch
Mask 3: P-Field	Photo
	P-Type Implant (P-Field)
	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
Mask 5: Thin Gate oxide & VTP Adjust	Oxide Etch
	Oxidation (Pre-Gate Oxide)
	Oxide Etch
	Oxidation (Thin Gate Oxide)
	Photo
Mask 6: Polysilicon Gate Patterning	P-Type Implant (VTP Adjust)
	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
	Polysilicon Etch
Mask 7: P-Base	Photo
Mask 8: N-Extended	P-Type Implant (P-Base)
	Photo
	N-Type Implant (N-Extended)
Mask 10: N+ Implant	Oxidation and Diffusion
	Polysilicon Oxidation
	Photo
Mask 11: P+ Implant	N-Type Implant (N+)
	Photo
	P-Type Implant (P+)
Mask 12: Contacts	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
	Contact Etch
Mask 13: Metal 1	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 14: Vias	Dielectric and SOG (Oxide) Deposition
	Photo
	Vias Etch
Mask 15: Metal 2	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 16: Passivation	Oxide / Nitride Deposition
	Photo
	Oxide Etch

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Figure 8

Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
	Diffusion
Mask 2: Active Area	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
	Photo
	Nitride Etch
Mask 3: P-Field	Photo
	P-Type Implant (P-Field)
	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
Mask 5: Thin Gate oxide & VTP Adjust	Oxide Etch
	Oxidation (Pre-Gate Oxide)
	Oxide Etch
	Oxidation (Thin Gate Oxide)
	Photo
Mask 6: Polysilicon Gate Patterning	P-Type Implant (VTP Adjust)
	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
	Polysilicon Etch
Mask 7: P-Base	Photo
Mask 9: P-Top	P-Type Implant (P-Base)
	Photo
	P-Type Implant (P-Top)
Mask 10: N+ Implant	Oxidation and Diffusion
	Polysilicon Oxidation
	Photo
Mask 11: P+ Implant	N-Type Implant (N+)
	Photo
	P-Type Implant (P+)
Mask 12: Contacts	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
	Contact Etch
Mask 13: Metal 1	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 14: Vias	Dielectric and SOG (Oxide) Deposition
	Photo
	Vias Etch
Mask 15: Metal 2	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 16: Passivation	Oxide / Nitride Deposition
	Photo
	Oxide Etch

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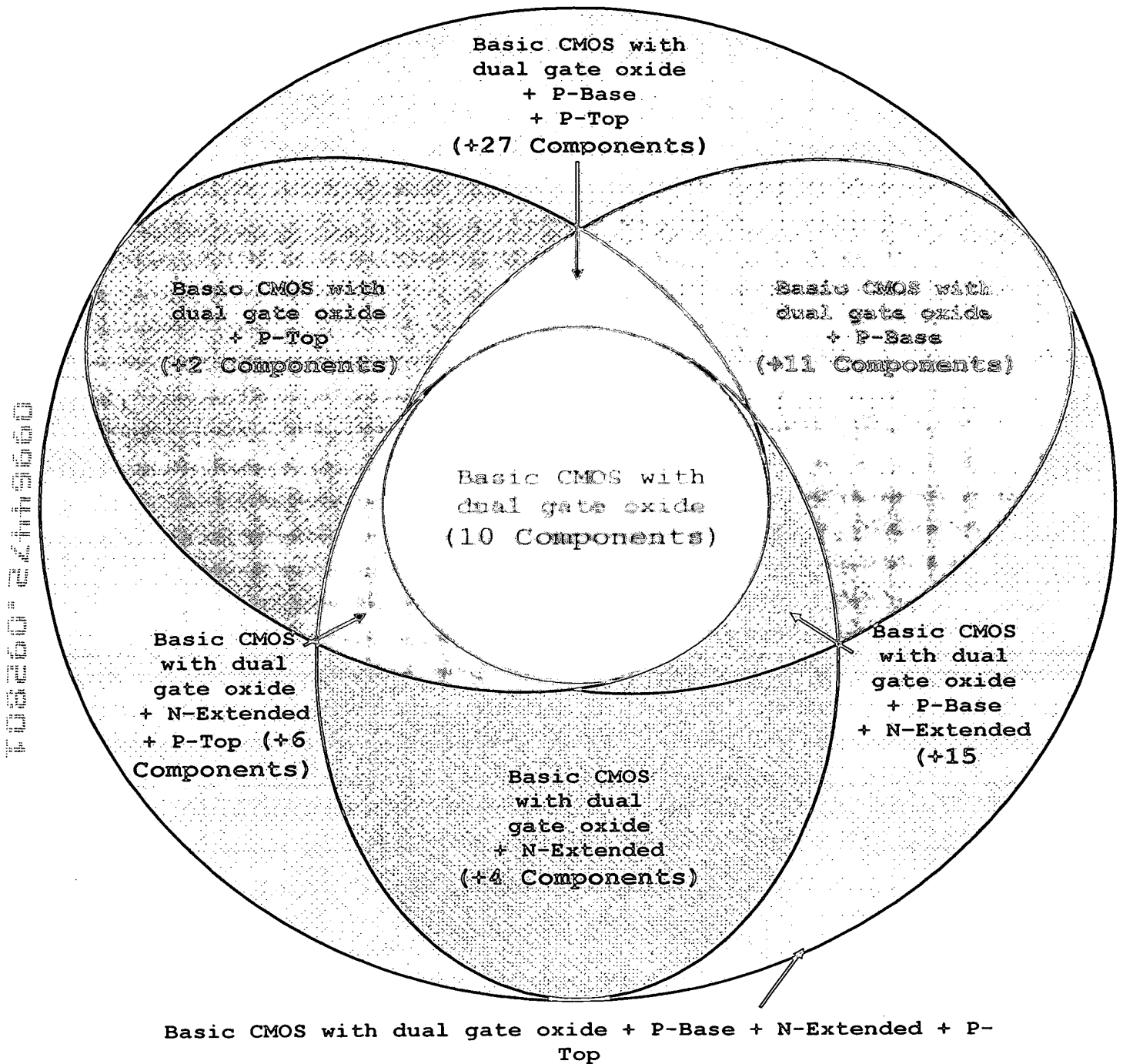


Figure 9

Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
	Diffusion
Mask 2: Active Area	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
	Photo
	Nitride Etch
Mask 3: P-Field	Photo
	P-Type Implant (P-Field)
	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
Mask 5: Thin Gate oxide & VTP Adjust	Oxide Etch
	Oxidation (Pre-Gate Oxide)
	Oxide Etch
	Oxidation (Thin Gate Oxide)
	Photo
Mask 6: Polysilicon Gate Patterning	P-Type Implant (VTP Adjust)
	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
	Polysilicon Etch
Mask 7: P-Base	Photo
Mask 8: N-Extended	P-Type Implant (P-Base)
	Photo
Mask 9: P-Top	N-Type Implant (N-Extended)
	Photo
Mask 10: N+ Implant	P-Type Implant (P-Top)
	Oxidation and Diffusion
	Polysilicon Oxidation
	Photo
	N-Type Implant (N+)
Mask 11: P+ Implant	Photo
	P-Type Implant (P+)
	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
Mask 12: Contacts	Contact Etch
	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 13: Metal 1	Dielectric and SOG (Oxide) Deposition
	Photo
	Vias Etch
Mask 14: Vias	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
	Oxide / Nitride Deposition
Mask 15: Metal 2	Photo
	Oxide Etch
Mask 16: Passivation	Photo
	Oxide Etch

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Figure 10



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Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
Mask 2: Active Area	Diffusion
	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
Mask 3: P-Field	Photo
	Nitride Etch
	Photo
	P-Type Implant (P-Field)
	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
	Oxide Etch
Mask 4: High-voltage Gate Oxide	Oxidation (Pre-Gate Oxide)
	Oxide Etch
	Oxidation (High-voltage Gate Oxide)
Mask 5: Thin Gate oxide & VTP Adjust	Photo
	Oxide Etch
	Oxidation (Thin Gate Oxide)
	Photo
Mask 6: Polysilicon Gate Patterning	P-Type Implant (VTP Adjust)
	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
Mask 9: P-Top	Polysilicon Etch
	Photo
Mask 10: N+ Implant	P-Type Implant (P-Top)
	Oxidation and Diffusion
	Polysilicon Oxidation
	Photo
Mask 11: P+ Implant	N-Type Implant (N+)
	Photo
Mask 12: Contacts	P-Type Implant (P+)
	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
Mask 13: Metal 1	Contact Etch
	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
Mask 14: Vias	Metal Etch
	Dielectric and SOG (Oxide) Deposition
	Photo
Mask 15: Metal 2	Vias Etch
	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
Mask 16: Passivation	Metal Etch
	Oxide / Nitride Deposition
	Photo

Figure 13

Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
Mask 2: Active Area	Diffusion
	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
Mask 3: P-Field	Photo
	Nitride Etch
	Photo
	P-Type Implant (P-Field)
Mask 4: High-voltage Gate Oxide	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
	Oxide Etch
Mask 5: Thin Gate oxide & VTP Adjust	Oxidation (Pre-Gate Oxide)
	Oxide Etch
	Oxidation (High-voltage Gate Oxide)
	Photo
Mask 6: Polysilicon Gate Patterning	Oxide Etch
	Oxidation (Thin Gate Oxide)
	Photo
	P-Type Implant (VTP Adjust)
Mask 8: N-Extended	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
	Polysilicon Etch
Mask 10: N+ Implant	Photo
	N-Type Implant (N-Extended)
	Oxidation and Diffusion
	Polysilicon Oxidation
Mask 11: P+ Implant	Photo
	N-Type Implant (N+)
	Photo
	P-Type Implant (P+)
Mask 12: Contacts	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
	Contact Etch
Mask 13: Metal 1	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 14: Vias	Dielectric and SOG (Oxide) Deposition
	Photo
	Vias Etch
	Ti/TiN Deposition with Oxidation
Mask 15: Metal 2	Aluminium Alloy Deposition
	Photo
	Metal Etch
	Oxide / Nitride Deposition
Mask 16: Passivation	Photo
	Oxide Etch

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Figure 14

Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
	Diffusion
Mask 2: Active Area	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
	Photo
	Nitride Etch
Mask 3: P-Field	Photo
	P-Type Implant (P-Field)
	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
	Oxide Etch
	Oxidation (Pre-Gate Oxide)
Mask 4: High-voltage Gate Oxide	Oxide Etch
Mask 5: Thin Gate oxide & VTP Adjust	Oxidation (High-voltage Gate Oxide)
	Photo
	Oxide Etch
	Oxidation (Thin Gate Oxide)
Mask 6: Polysilicon Gate Patterning	Photo
	P-Type Implant (VTP Adjust)
	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
Mask 8: N-Extended	Polysilicon Etch
Mask 9: P-Top	Photo
	N-Type Implant (N-Extended)
Mask 10: N+ Implant	Photo
	P-Type Implant (P-Top)
	Oxidation and Diffusion
	Polysilicon Oxidation
Mask 11: P+ Implant	Photo
	N-Type Implant (N+)
Mask 12: Contacts	Photo
	P-Type Implant (P+)
	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
Mask 13: Metal 1	Contact Etch
	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 14: Vias	Dielectric and SOG (Oxide) Deposition
	Photo
Mask 15: Metal 2	Vias Etch
	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 16: Passivation	Oxide / Nitride Deposition
	Photo
	Oxide Etch



Figure 16

Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
	Diffusion
Mask 2: Active Area	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
	Photo
	Nitride Etch
Mask 3: P-Field	Photo
	P-Type Implant (P-Field)
	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
Mask 4: High-voltage Gate Oxide	Oxide Etch
	Oxidation (High-voltage Gate Oxide)
	Photo
	Oxide Etch
	Oxidation (Thin Gate Oxide)
Mask 5: Thin Gate oxide & VTP Adjust	Photo
	P-Type Implant (VTP Adjust)
	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
Mask 6: Polysilicon Gate Patterning	Polysilicon Etch
	Photo
	P-Type Implant (P-Base)
	Photo
	N-Type Implant (N-Extended)
Mask 7: P-Base	Oxidation and Diffusion
	Polysilicon Oxidation
	Photo
	N-Type Implant (N+)
	Photo
Mask 8: N-Extended	P-Type Implant (P+)
	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
	Contact Etch
Mask 10: N+ Implant	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
	Dielectric and SOG (Oxide) Deposition
Mask 11: P+ Implant	Photo
	Vias Etch
	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
Mask 12: Contacts	Metal Etch
	Oxide / Nitride Deposition
	Photo
	Oxide Etch
Mask 13: Metal 1	
Mask 14: Vias	
Mask 15: Metal 2	
Mask 16: Passivation	

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Figure 17

Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
	Diffusion
Mask 2: Active Area	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
	Photo
	Nitride Etch
Mask 3: P-Field	Photo
	P-Type Implant (P-Field)
	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
	Oxide Etch
	Oxidation (Pre-Gate Oxide)
Mask 4: High-voltage Gate Oxide	Oxide Etch
	Oxidation (High-voltage Gate Oxide)
Mask 5: Thin Gate oxide & VTP Adjust	Photo
	Oxide Etch
	Oxidation (Thin Gate Oxide)
	Photo
Mask 6: Polysilicon Gate Patterning	P-Type Implant (VTP Adjust)
	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
	Polysilicon Etch
Mask 7: P-Base	Photo
	P-Type Implant (P-Base)
Mask 9: P-Top	Photo
	P-Type Implant (P-Top)
Mask 10: N+ Implant	Oxidation and Diffusion
	Polysilicon Oxidation
	Photo
Mask 11: P+ Implant	N-Type Implant (N+)
	Photo
	P-Type Implant (P+)
Mask 12: Contacts	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
	Contact Etch
Mask 13: Metal 1	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 14: Vias	Dielectric and SOG (Oxide) Deposition
	Photo
	Vias Etch
Mask 15: Metal 2	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 16: Passivation	Oxide / Nitride Deposition
	Photo
	Oxide Etch

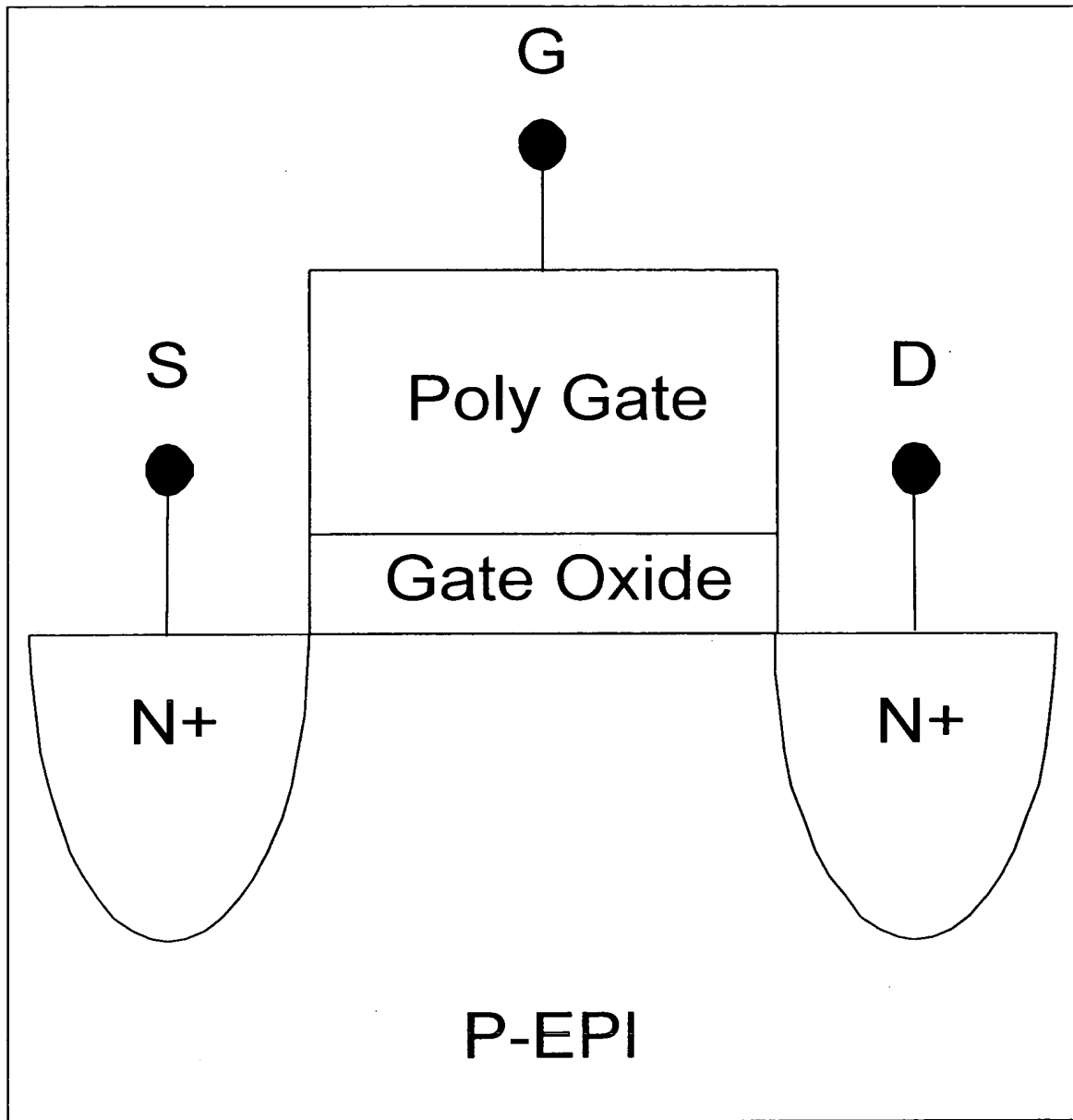
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Figure 18

Name of Photolithographic Mask	Process Steps
Mask 1: N-Well	Starting Material : P- Bulk Silicon
	Oxidation (Initial oxide)
	Photo
	N-Type Implant (N-Well)
	Diffusion
Mask 2: Active Area	Oxide Etch
	Oxidation (Subnitox)
	Silicon Nitride Deposition (CVD)
	Photo
	Nitride Etch
Mask 3: P-Field	Photo
	P-Type Implant (P-Field)
	Blanket N-Type Implant (N-Field)
	Oxidation (Field Oxide)
	Nitride Etch
	Oxide Etch
	Oxidation (Pre-Gate Oxide)
Mask 4: High-voltage Gate Oxide	Oxide Etch
	Oxidation (High-voltage Gate Oxide)
	Photo
Mask 5: Thin Gate oxide & VTP Adjust	Oxide Etch
	Oxidation (Thin Gate Oxide)
	Photo
Mask 6: Polysilicon Gate Patterning	P-Type Implant (VTP Adjust)
	Polysilicon Gate Deposition (CVD)
	Polysilicon Doping
	Photo
	Polysilicon Etch
Mask 7: P-Base	Photo
	P-Type Implant (P-Base)
Mask 8: N-Extended	Photo
	N-Type Implant (N-Extended)
Mask 9: P-Top	Photo
	P-Type Implant (P-Top)
Mask 10: N+ Implant	Oxidation and Diffusion
	Polysilicon Oxidation
	Photo
Mask 11: P+ Implant	N-Type Implant (N+)
	Photo
	P-Type Implant (P+)
Mask 12: Contacts	SG/PSG/SOG (Oxide) Deposition
	Diffusion
	Photo
	Contact Etch
Mask 13: Metal 1	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 14: Vias	Dielectric and SOG (Oxide) Deposition
	Photo
	Vias Etch
Mask 15: Metal 2	Ti/TiN Deposition with Oxidation
	Aluminium Alloy Deposition
	Photo
	Metal Etch
Mask 16: Passivation	Oxide / Nitride Deposition
	Photo
	Oxide Etch

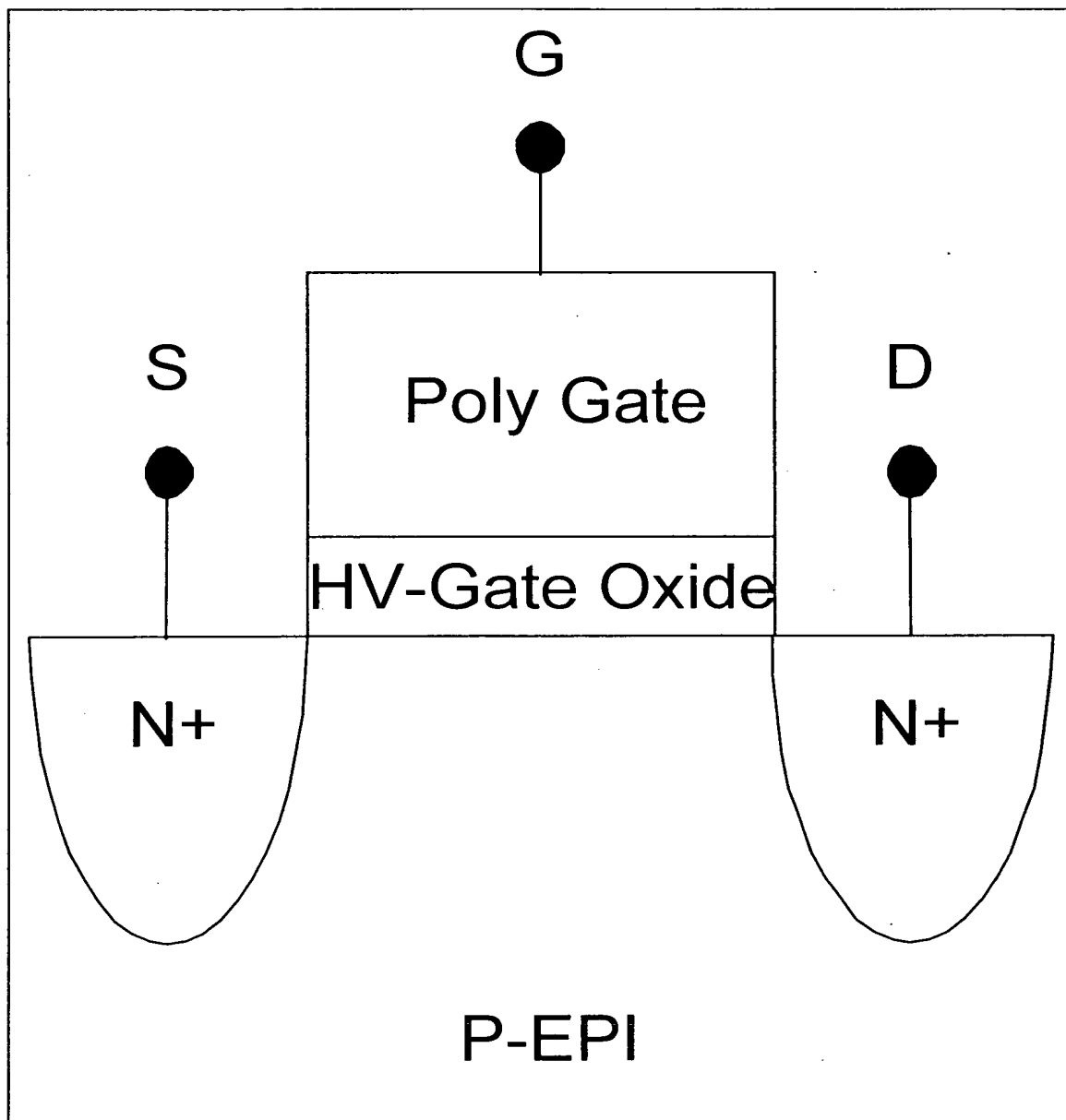
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Figure 19a



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Figure 19b



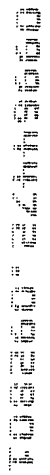
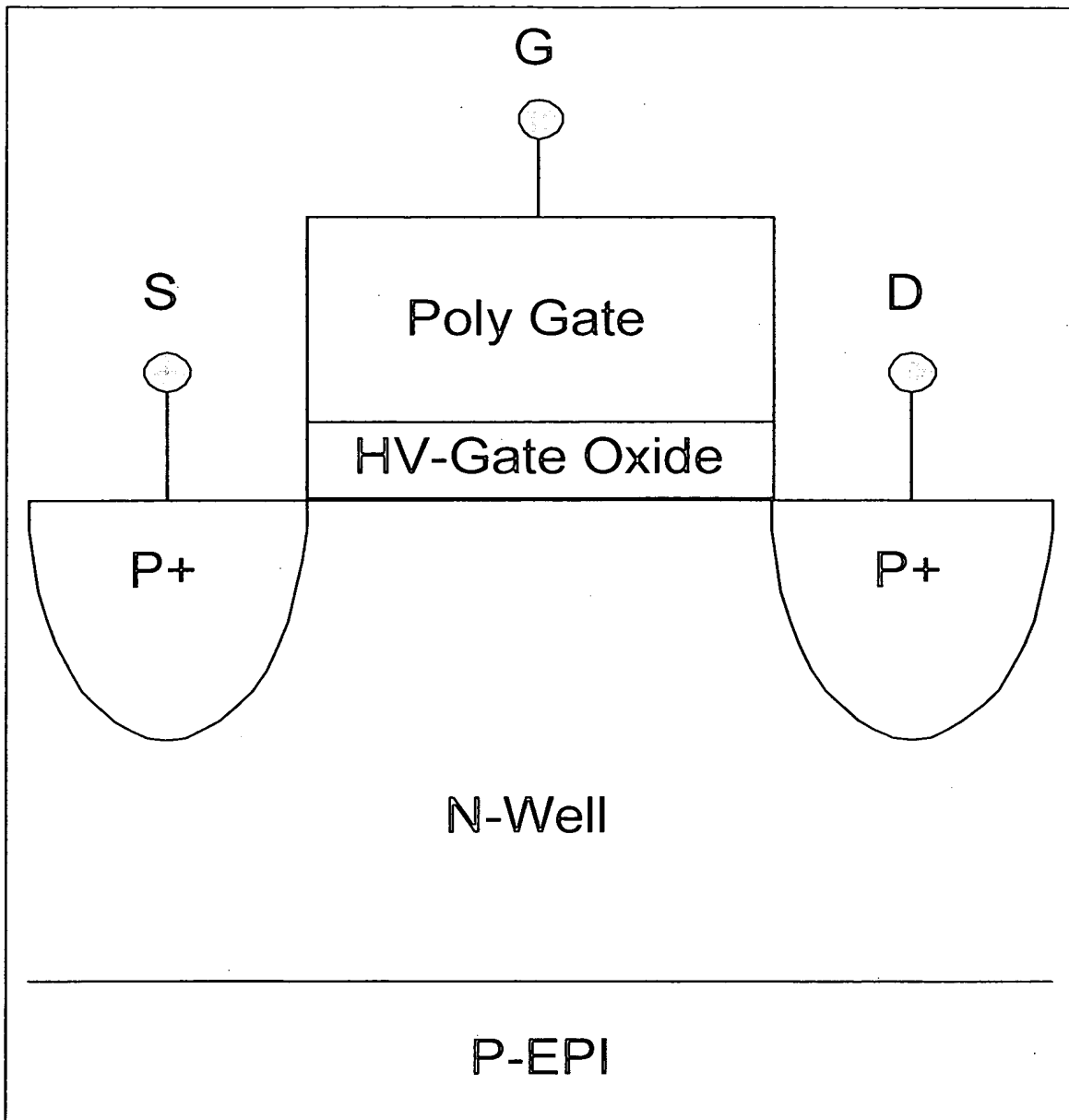
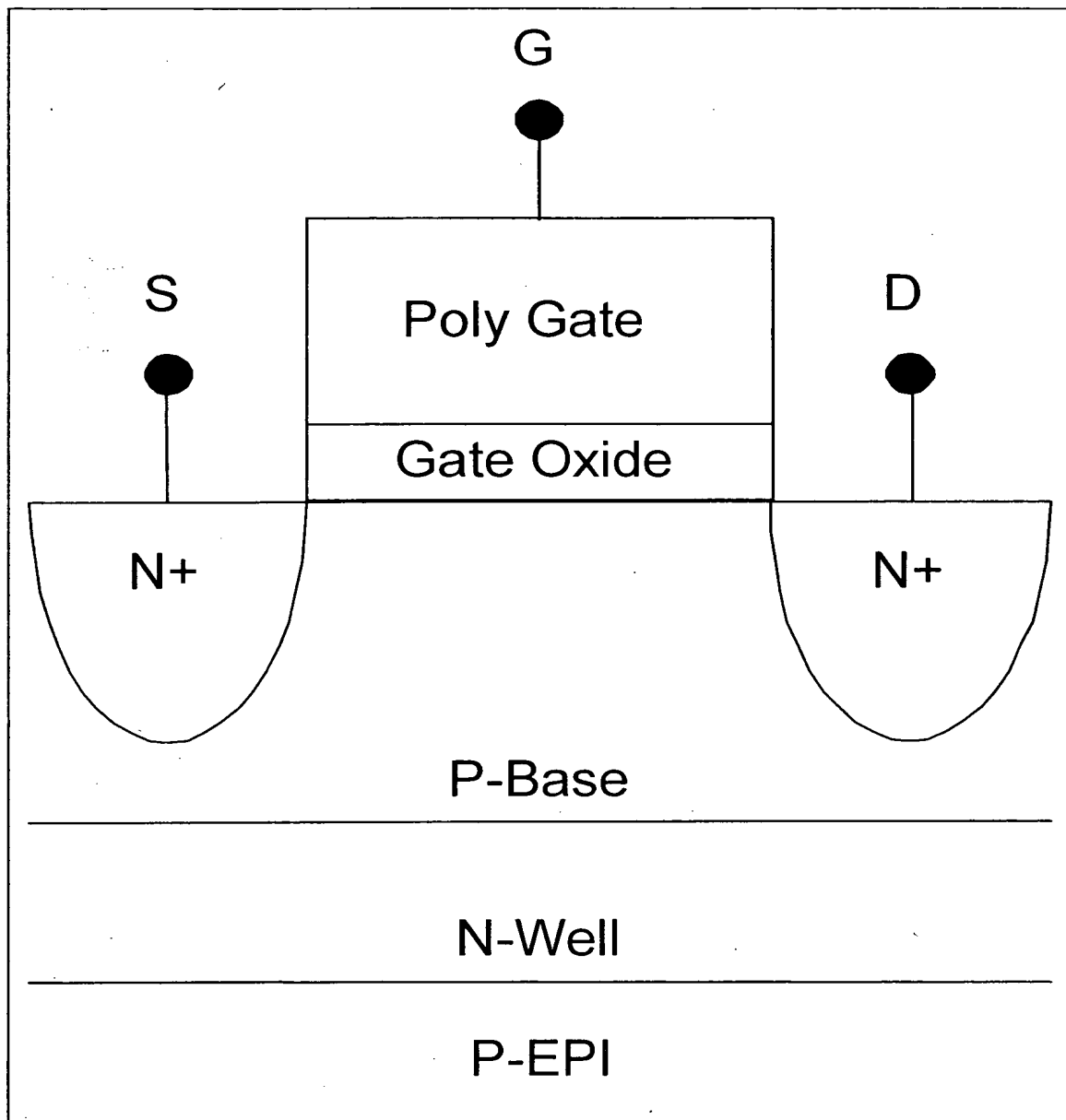


Figure 20b



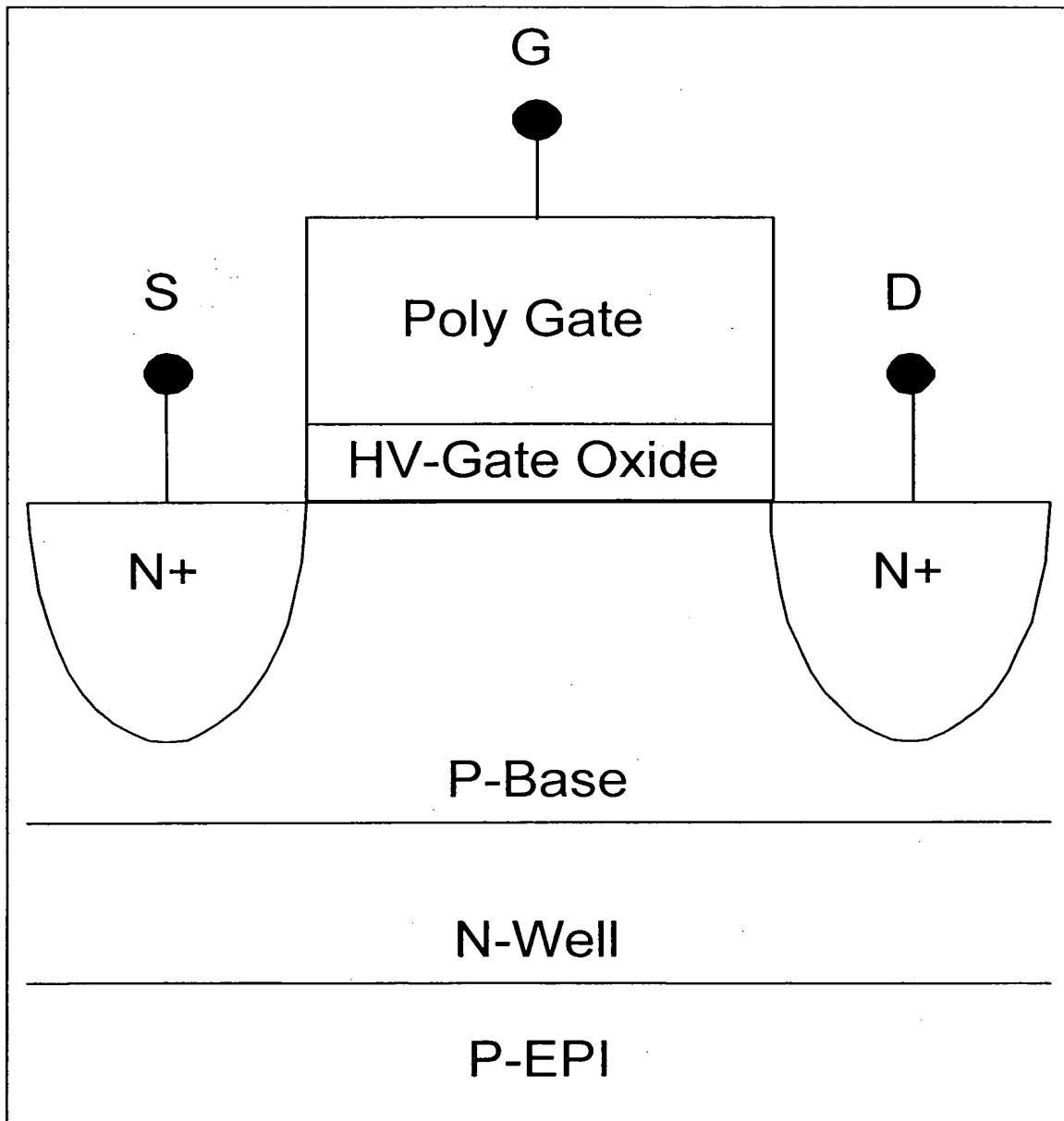
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Figure 21a



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Figure 21b



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Figure 22a

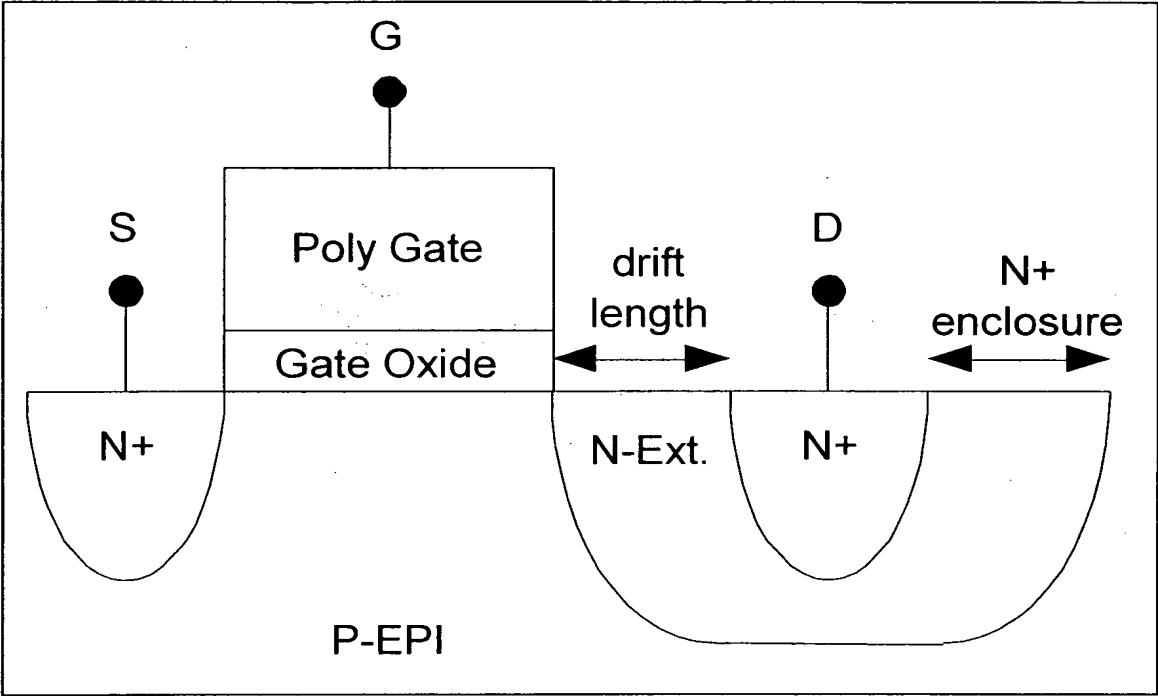


Figure 22b

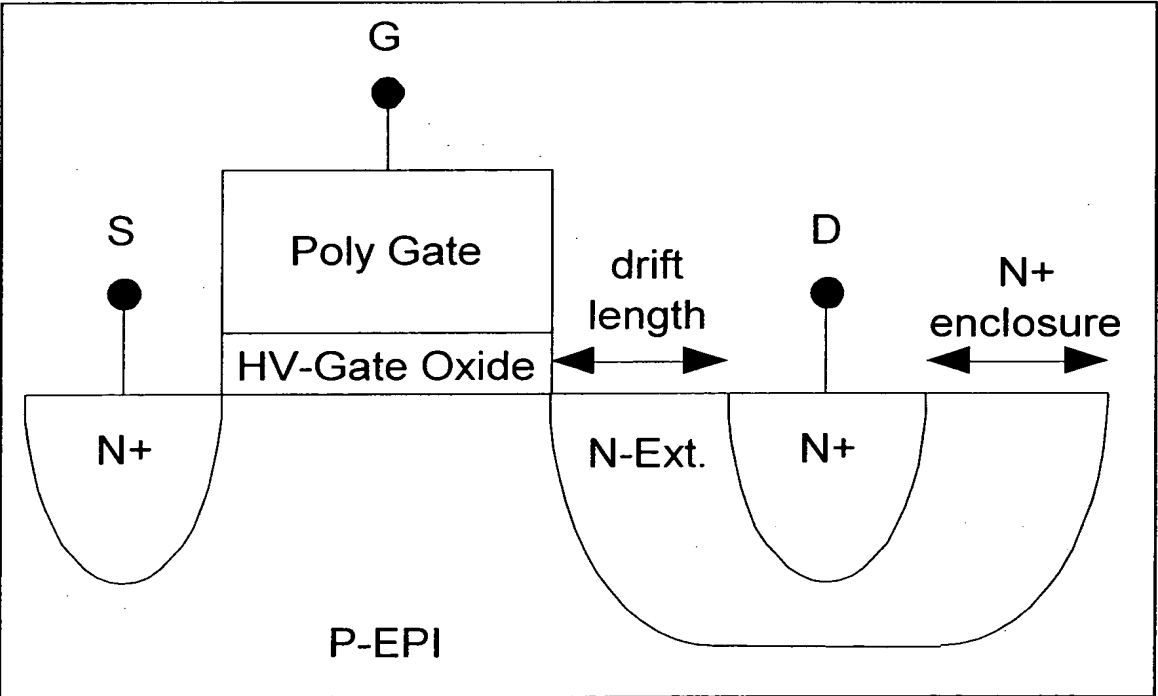


Figure 23a

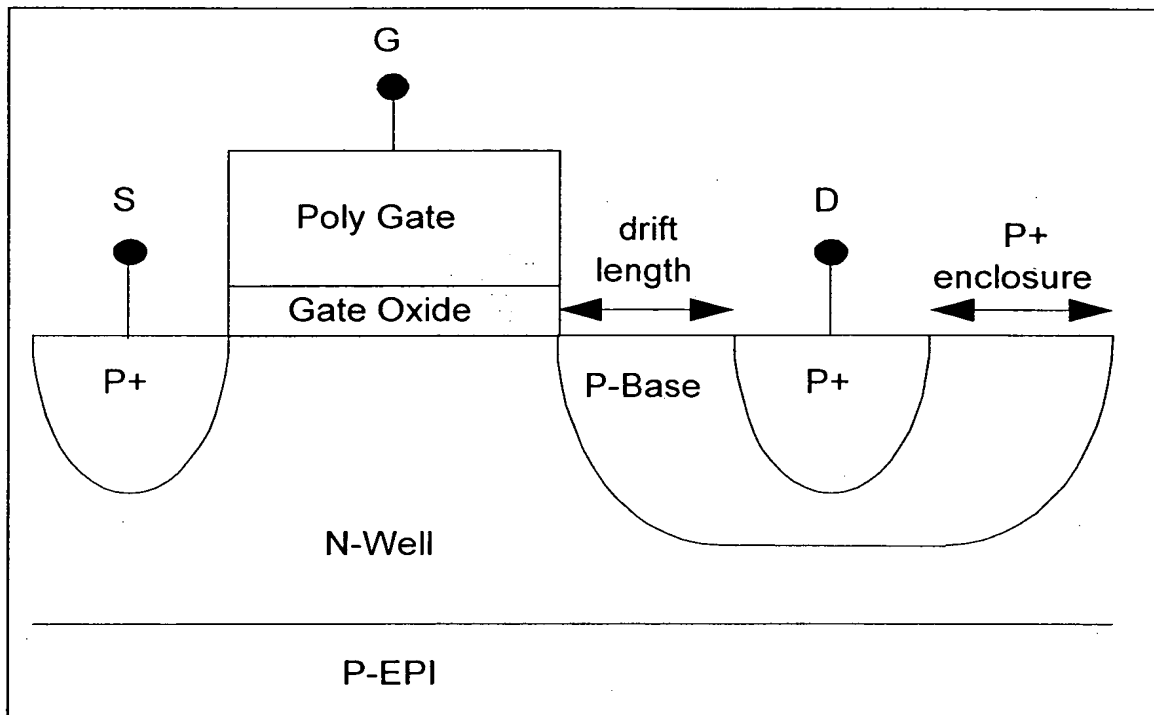
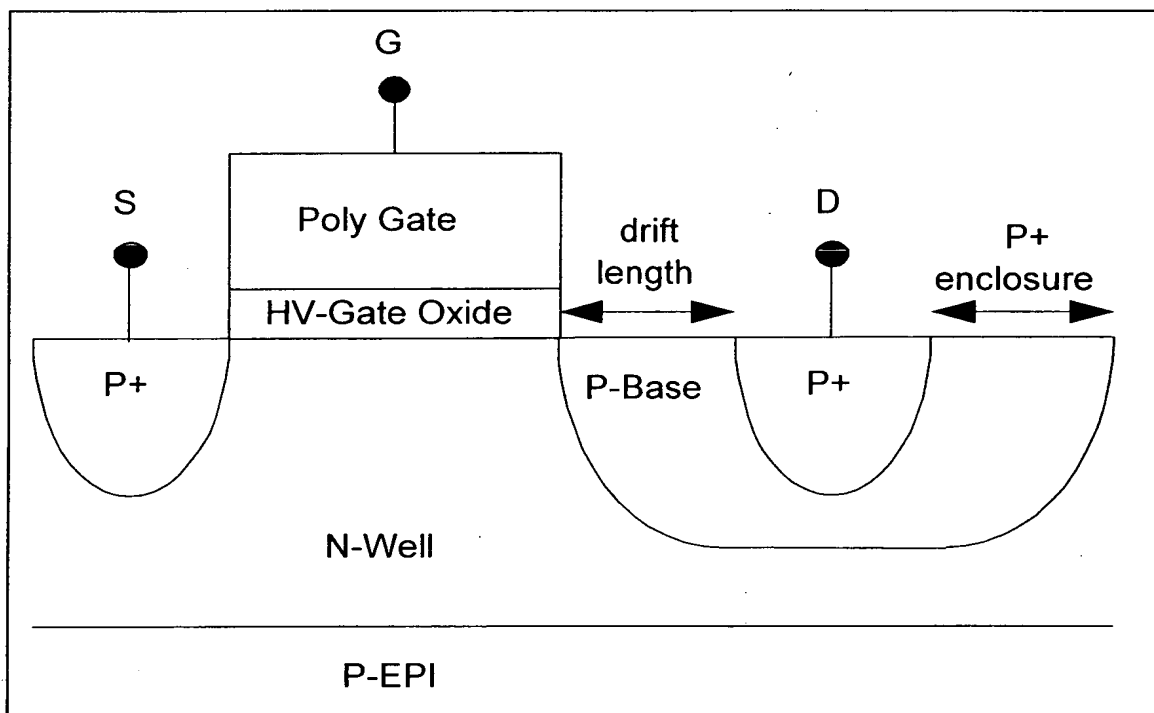


Figure 23b



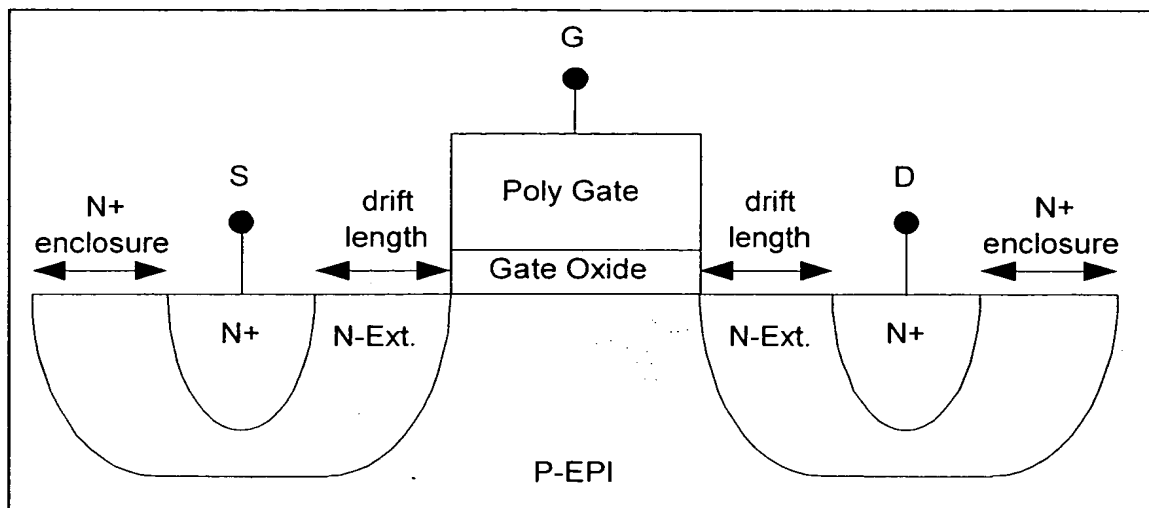
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Figure 24b

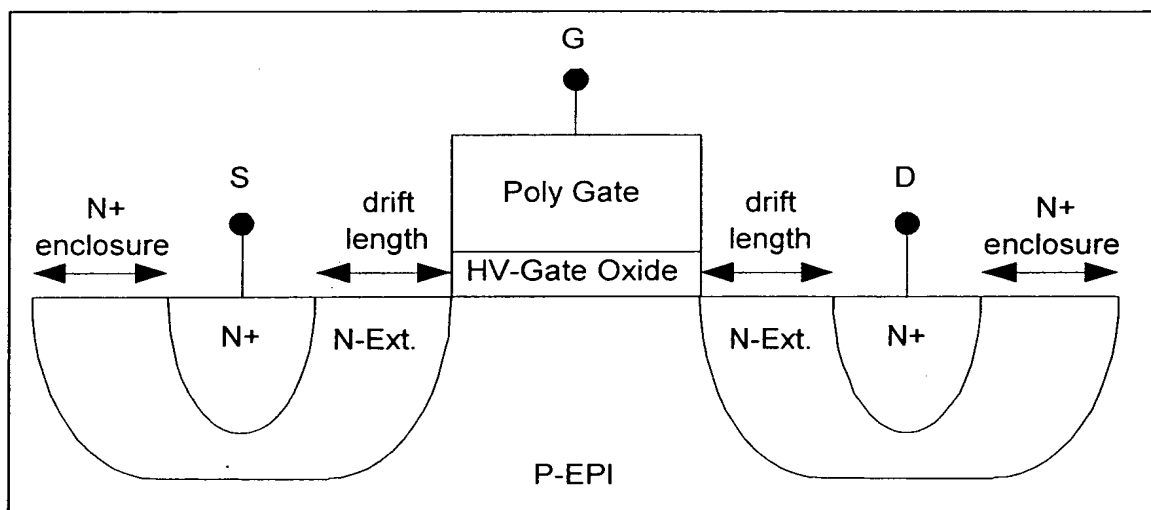


Figure 25a

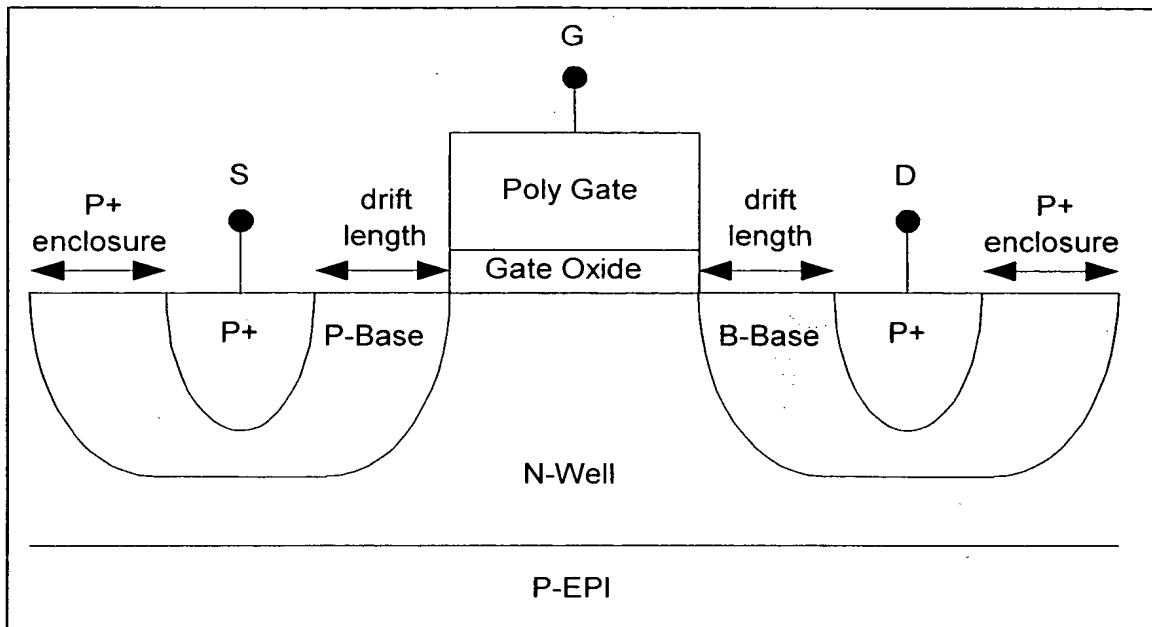
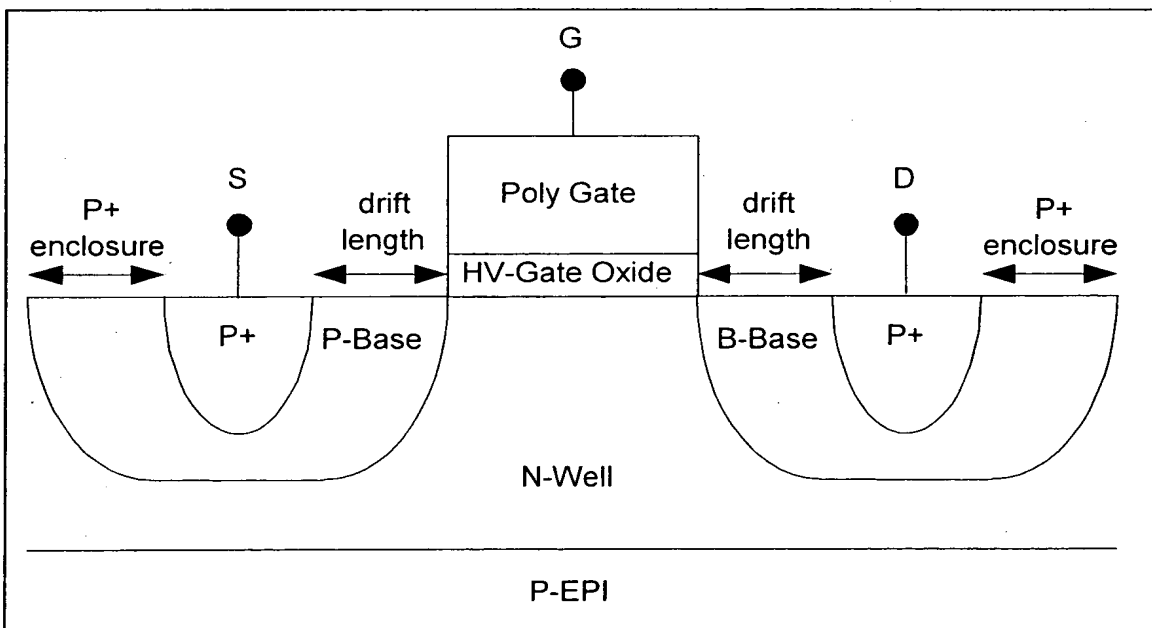


Figure 25b



100200 22113660

Figure 26a

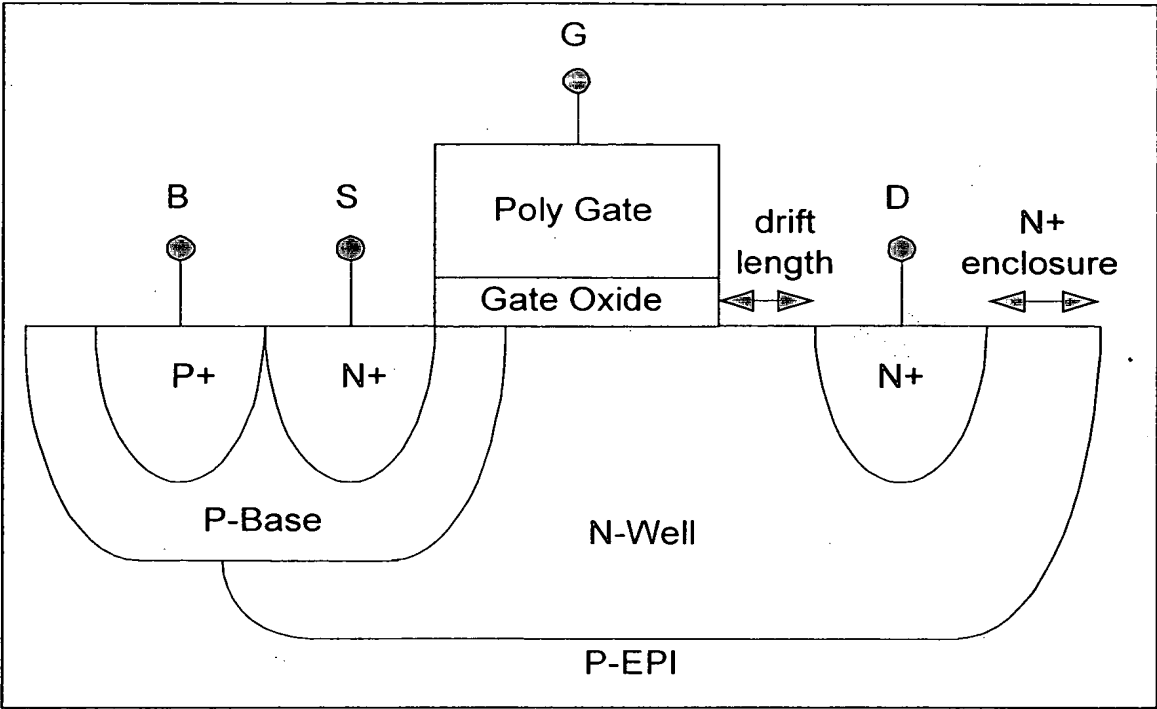


Figure 26b

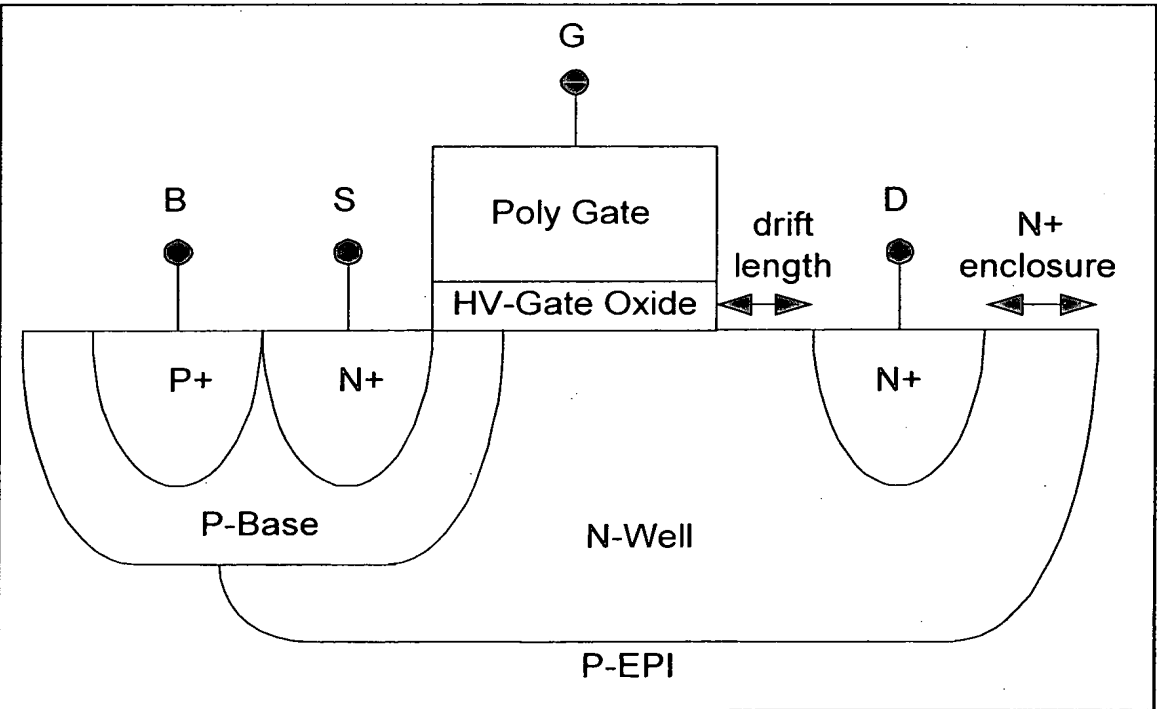


Figure 27a

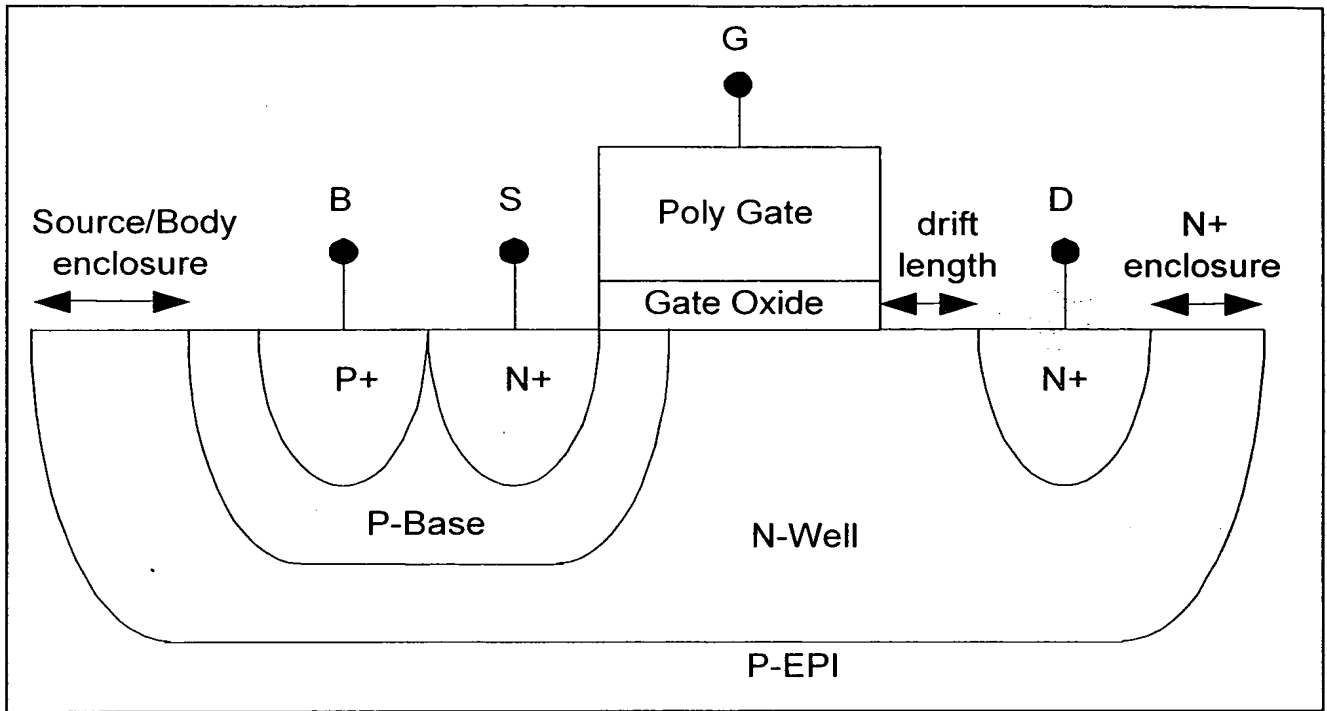
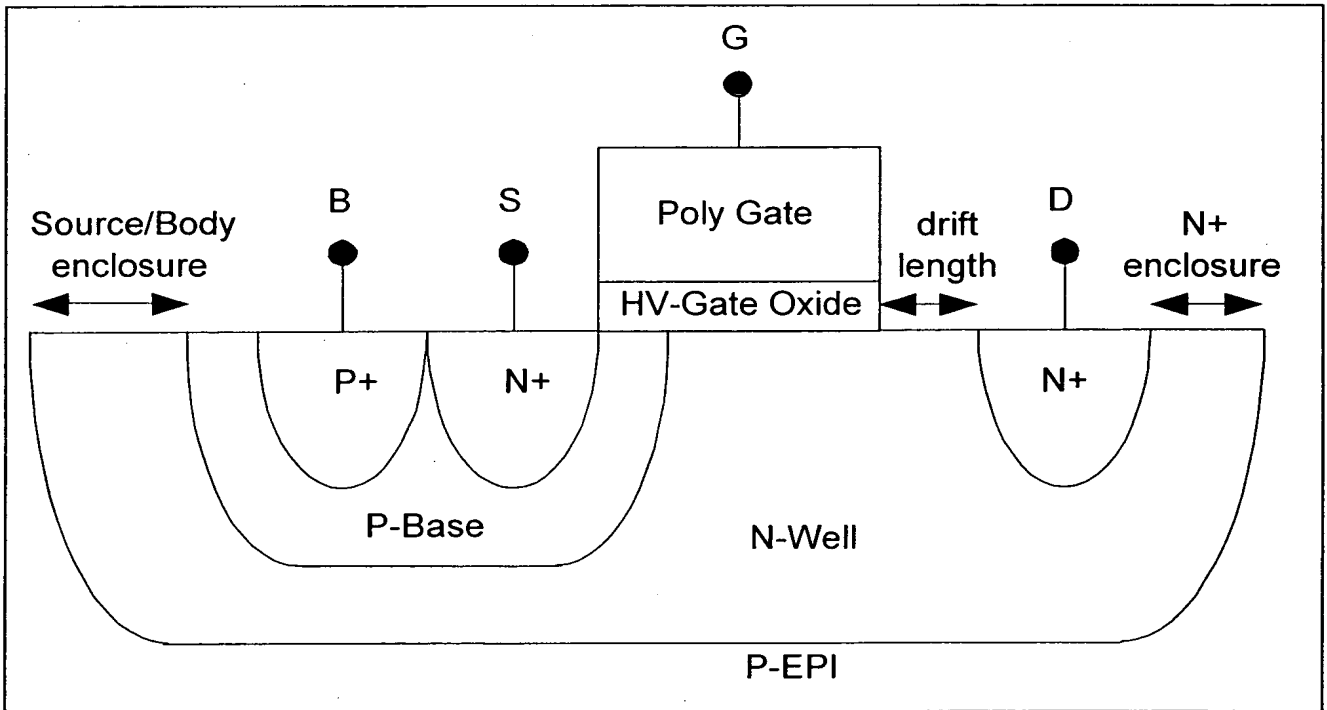


Figure 27b



000000 2449600

Figure 28a

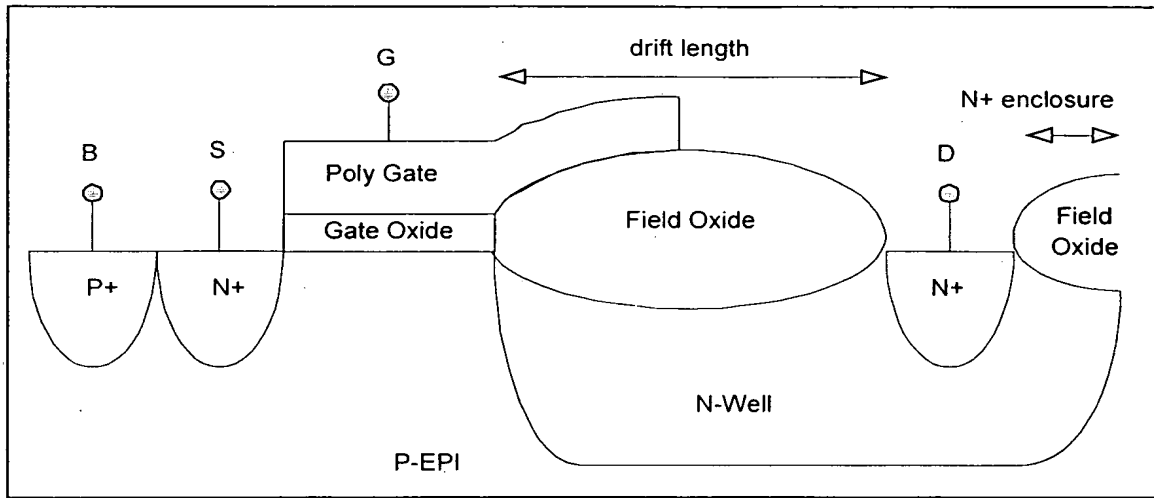


Figure 28b

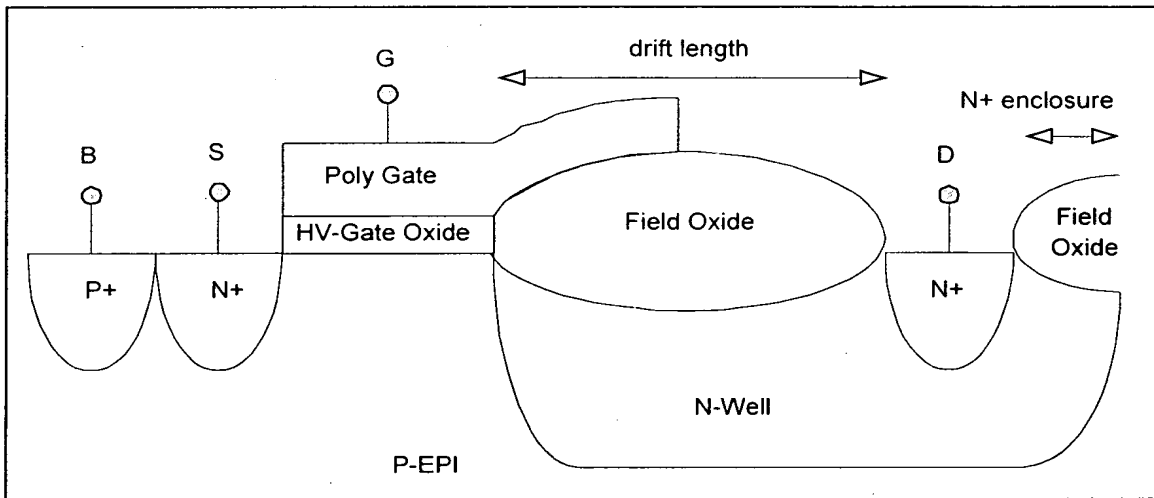


FIGURE 28a

Figure 29a

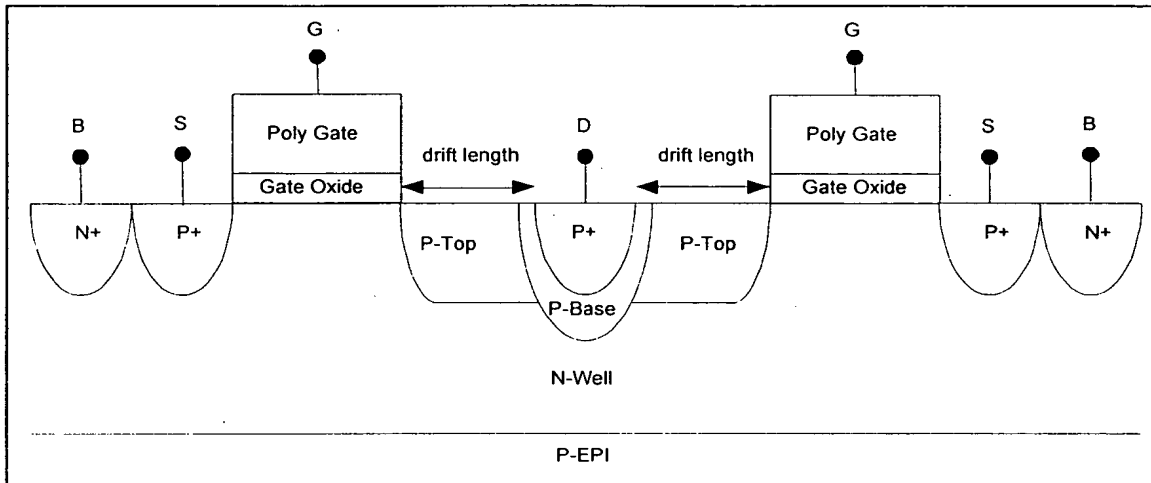


Figure 29b

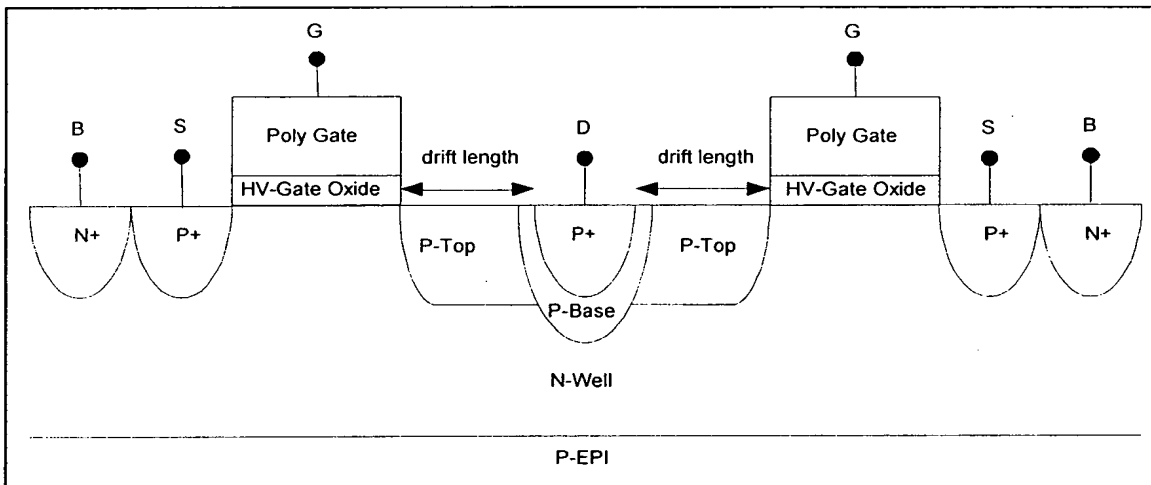
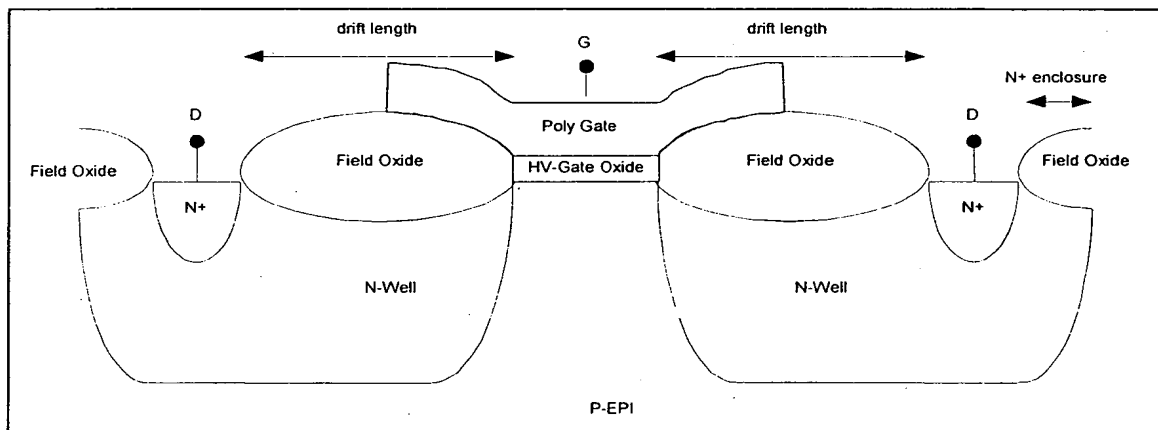


Figure 29a



[illegible]

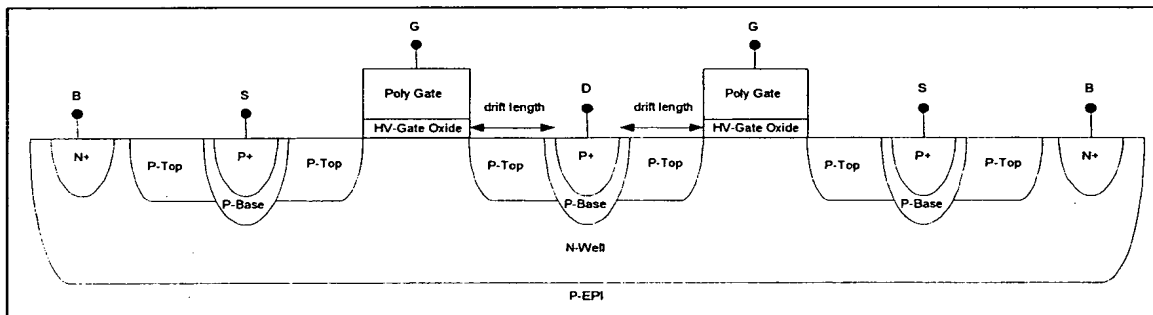
[illegible]

Figure 32a

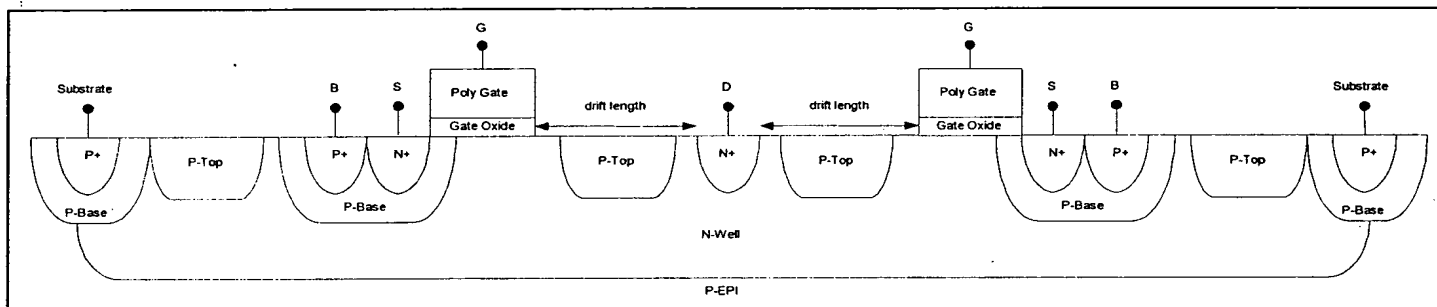


Figure 32b

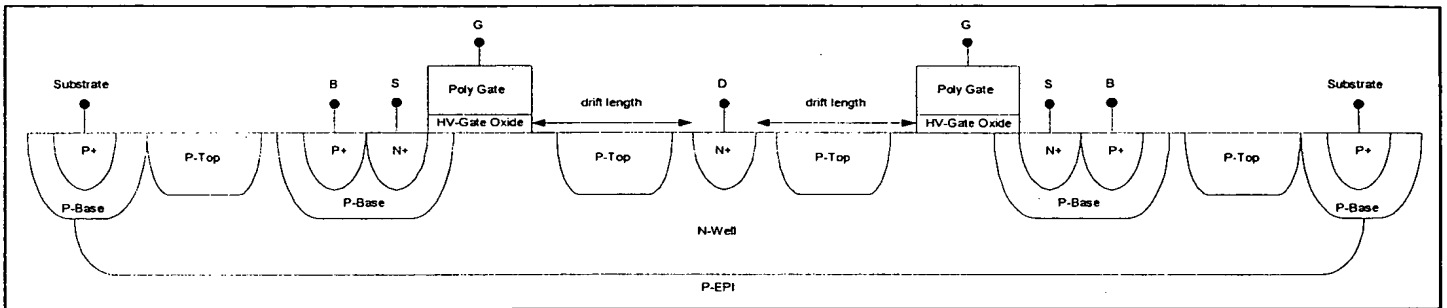


Figure 33a

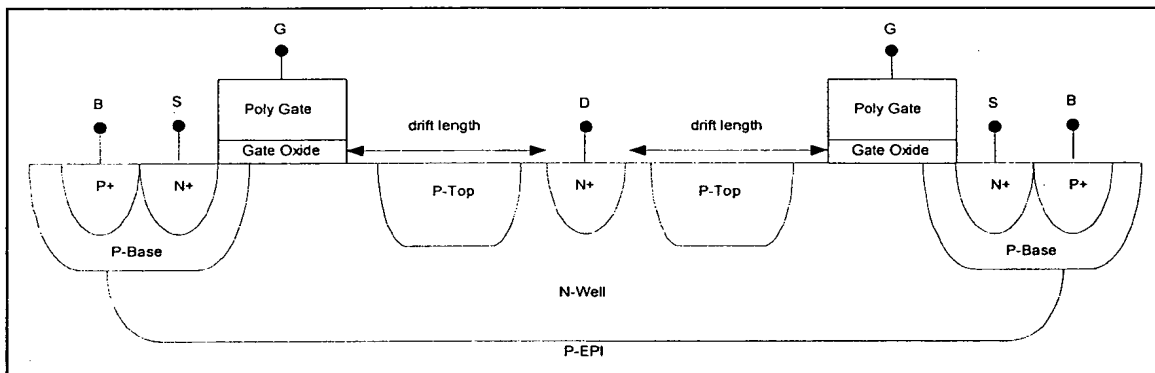


Figure 33b

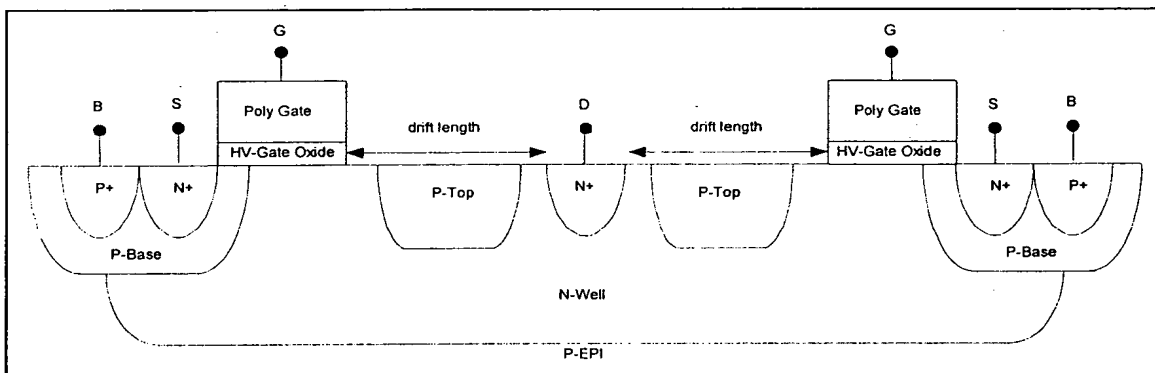


Figure 32b

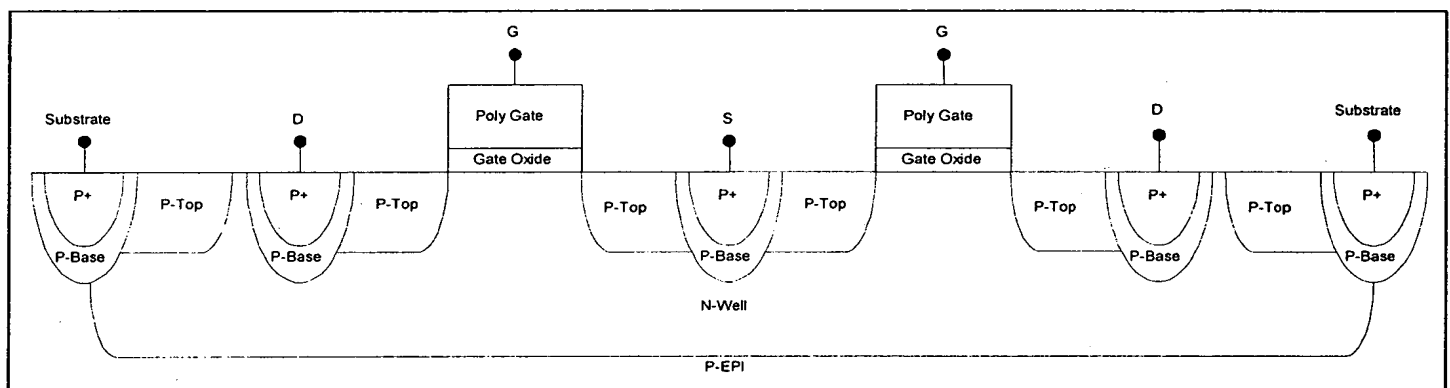
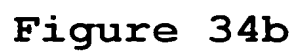
[illegible]

Figure 35b

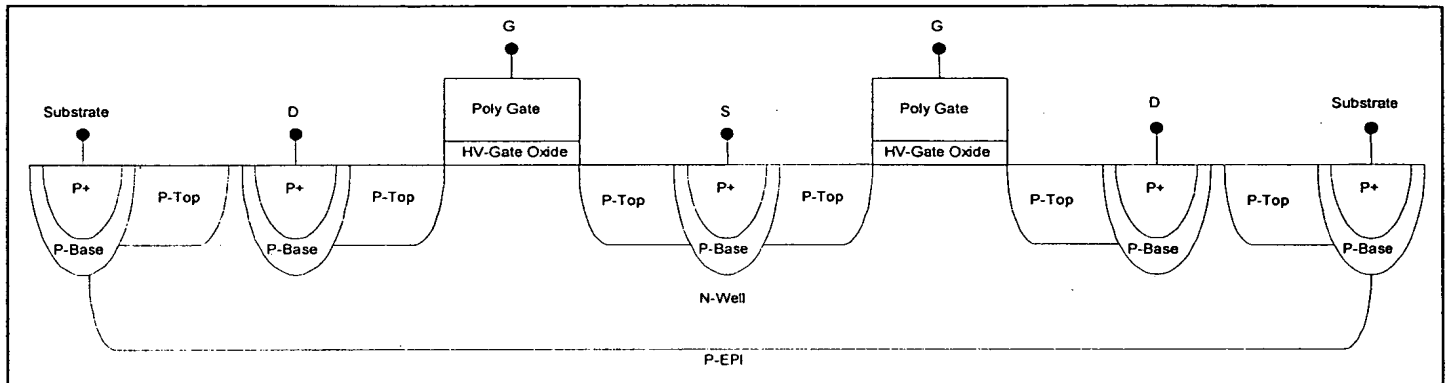


Figure 36

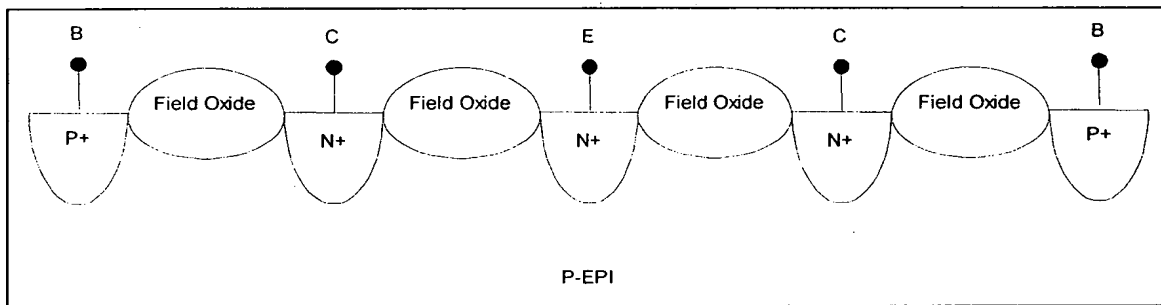


Figure 37

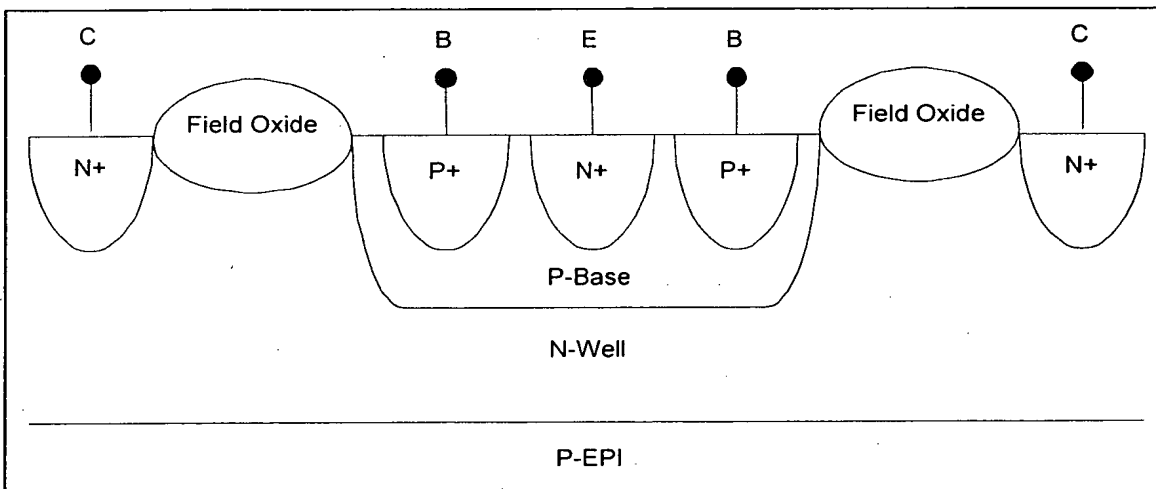


Figure 38

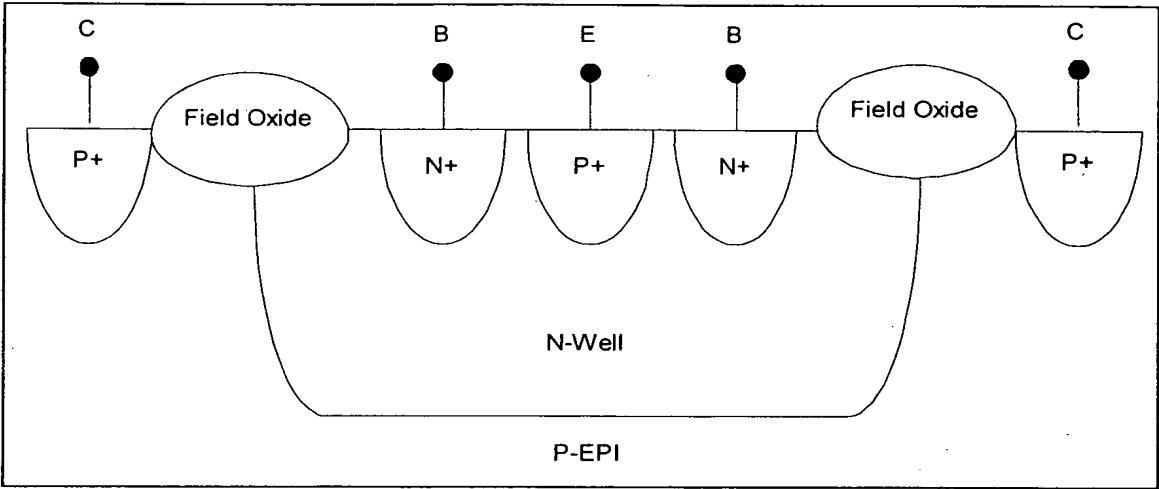


Figure 39

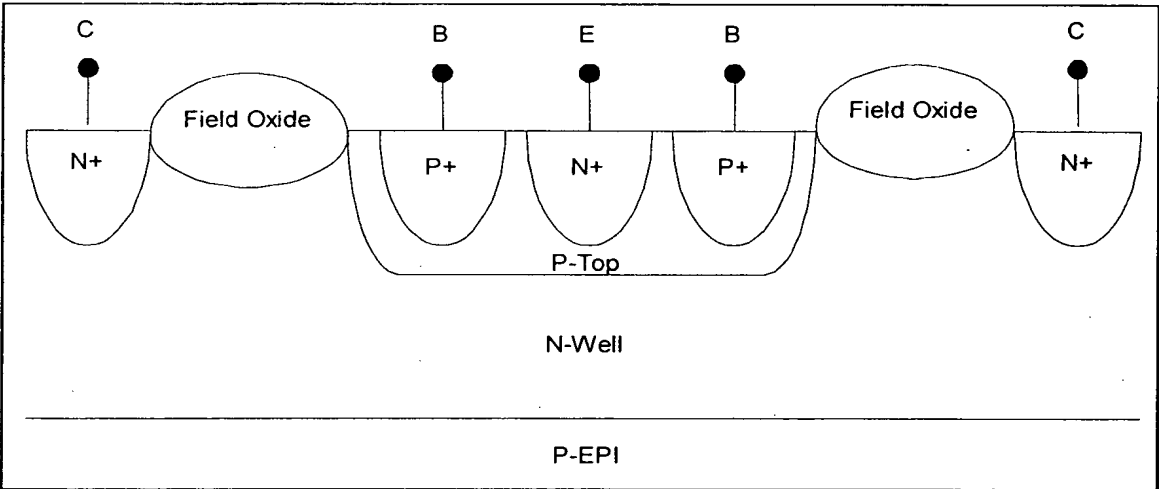


Figure 40

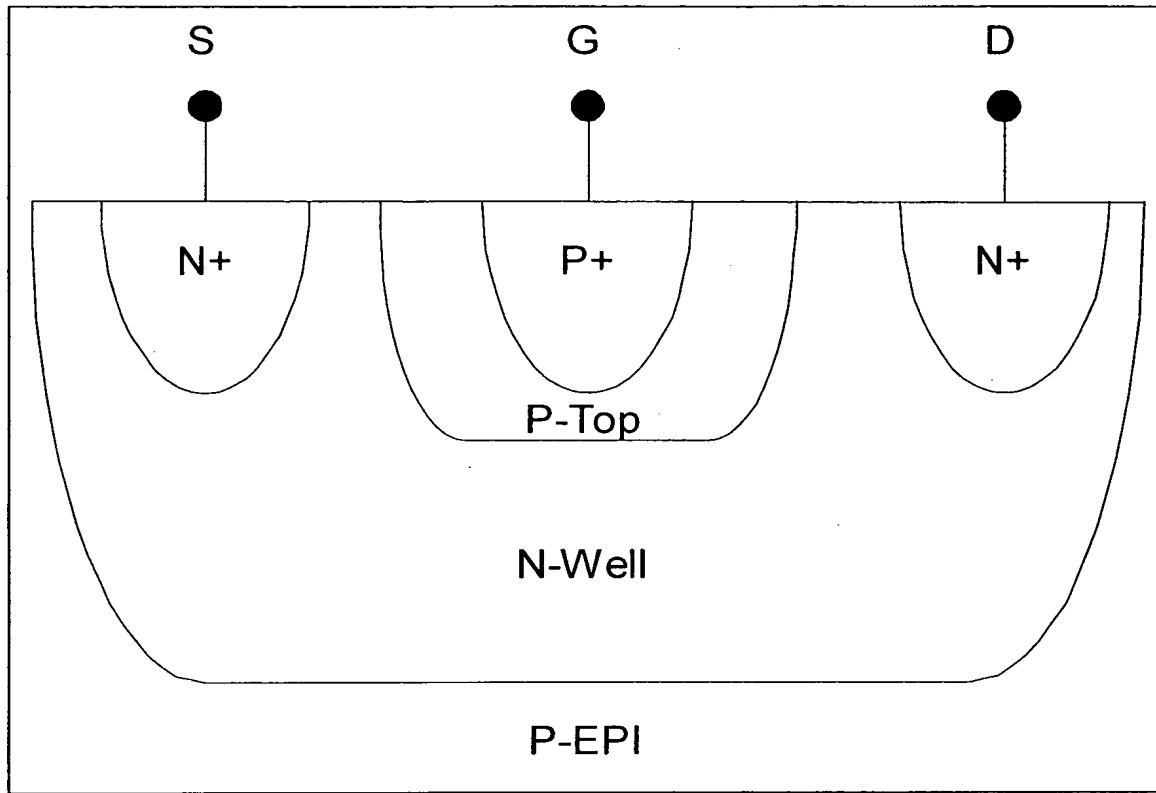


Figure 41a

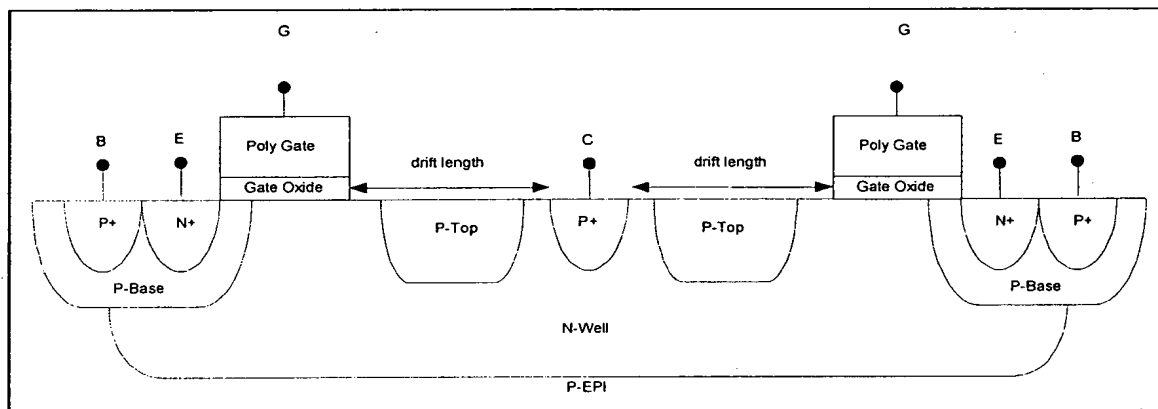
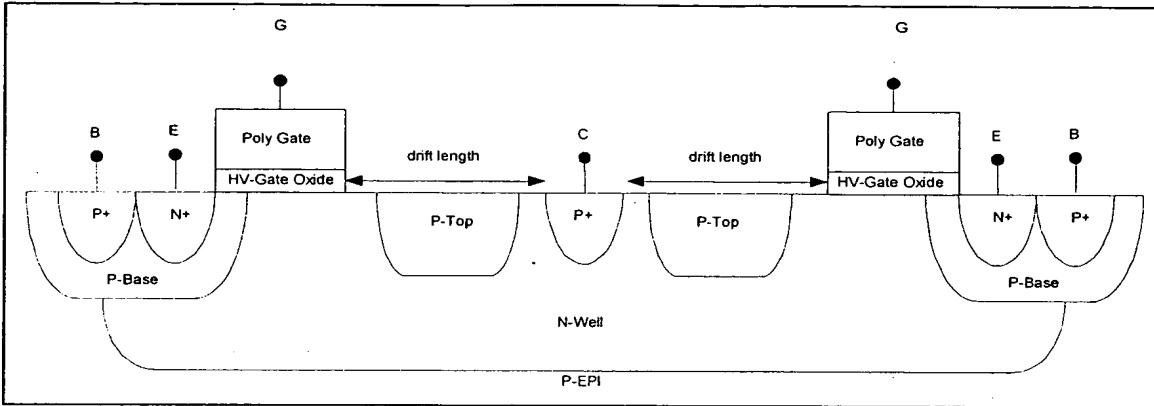


Figure 41b



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# Figure 42

Active Component	Maximum Gate Voltage (V)	Maximum Drain Voltage (V)
The standard N-MOSFET of <b>Figure 19a</b>	15	5.5
The standard N-MOSFET of <b>Figure 19b</b>	40	5.5
The standard P-MOSFET of <b>Figure 20a</b>	15	5.5
The standard P-MOSFET of <b>Figure 20b</b>	40	5.5
The standard Junction isolated N-MOSFET of <b>Figure 21a</b>	15	5.5
The standard Junction isolated N-MOSFET of <b>Figure 21b</b>	40	5.5
The mid-voltage single extended N-MOSFET of <b>Figure 22a</b>	15	40
The mid-voltage single extended N-MOSFET of <b>Figure 22b</b>	40	40
The mid-voltage single extended P-MOSFET of <b>Figure 23a</b>	15	40
The mid-voltage single extended P-MOSFET of <b>Figure 23b</b>	40	40
The mid-voltage double extended N-MOSFET of <b>Figure 24a</b>	15	40
The mid-voltage double extended N-MOSFET of <b>Figure 24b</b>	40	40
The mid-voltage double extended P-MOSFET of <b>Figure 25a</b>	15	40
The mid-voltage double extended P-MOSFET of <b>Figure 25b</b>	40	40
The mid-voltage single extended N-LDMOSFET of <b>Figure 26a</b>	15	75
The mid-voltage single extended N-LDMOSFET of <b>Figure 26b</b>	40	75
The mid-voltage floating source N-LDMOSFET of <b>Figure 27a</b>	15	75
The mid-voltage floating source N-LDMOSFET of <b>Figure 27b</b>	40	75
The high-voltage single extended N-MOSFET of <b>Figure 28a</b>	15	
100		
The high-voltage single extended N-MOSFET of <b>Figure 28b</b>	40	
100		
The high-voltage single extended P-MOSFET of <b>Figure 29a</b>	15	
100		
The high-voltage single extended P-MOSFET of <b>Figure 29b</b>	40	
100		
The high-voltage double extended N-MOSFET of <b>Figure 30a</b>	15	
100		
The high-voltage double extended N-MOSFET of <b>Figure 30b</b>	40	
100		
The high-voltage double extended P-MOSFET of <b>Figure 31a</b>	15	
100		
The high-voltage double extended P-MOSFET of <b>Figure 31b</b>	40	
100		
The high-voltage double extended N-LDMOSFET of <b>Figure 32a</b>	15	
325		
The high-voltage double extended N-LDMOSFET of <b>Figure 32b</b>	40	
325		
The very-high-voltage single extended N-LDMOSFET of <b>Figure 33a</b>	15	
600		
The very-high-voltage single extended N-LDMOSFET of <b>Figure 33b</b>	40	
600		
The very-high-voltage single extended P-MOSFET of <b>Figure 34a</b>	15	
325		
The very-high-voltage single extended P-MOSFET of <b>Figure 34b</b>	40	
325		
The very-high-voltage double extended P-MOSFET of <b>Figure 35a</b>	15	
325		

FIGURE 42



**Figure 43**

Junction	Typical Sheet Resistance	Typical Breakdown Voltage
P+ / N-Well	65 Ohms/sq.	20 Volts
N+ / P-Substrate	50 Ohms/sq.	25 Volts
P-Top / N-Well	14 kOhms/sq.	40 Volts
P-Base / N-well	1.75 kOhms/sq.	45 Volts
N-Ext. / P-Substrate	4 kOhms/sq.	45 Volts
N-Well / P-Substrate	1.5 kOhms/sq.	150 Volts
N-Well / P-Top / P-Substrate (RESURF)	-	650 Volts

Variable	Mean	SD	Min	Max	Median	Mode	Range	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	32	30	47	0.15	3.2	0.98
Gender	1.2	0.4	1	2	1	1	1	0.02	0.1	0.99
Marital Status	2.1	0.8	1	3	2	2	2	0.05	0.2	0.99
Education	12.5	2.1	8	16	12	12	8	0.12	3.1	0.98
Income	1500	500	500	3000	1200	1000	2500	0.18	3.3	0.97
Occupation	1.5	0.5	1	2	1	1	2	0.03	0.1	0.99
Religion	1.1	0.3	1	2	1	1	1	0.01	0.05	0.99
Health Status	2.5	0.6	1	3	2	2	3	0.04	0.2	0.99
Stress Level	3.2	1.1	1	5	3	3	4	0.16	3.2	0.98
Life Satisfaction	4.1	0.9	2	5	4	4	5	0.06	0.3	0.99
Resilience	3.8	1.0	2	5	4	4	5	0.07	0.4	0.99
Optimism	4.3	0.8	3	5	4	4	5	0.05	0.2	0.99
Emotional Stability	3.9	0.9	2	5	4	4	5	0.06	0.3	0.99
Self-Esteem	4.0	0.8	3	5	4	4	5	0.05	0.2	0.99
Life Purpose	3.7	1.0	2	5	4	4	5	0.07	0.4	0.99
Meaning in Life	3.6	1.0	2	5	4	4	5	0.07	0.4	0.99
Existential Well-being	3.5	1.0	2	5	4	4	5	0.07	0.4	0.99
Overall Well-being	3.4	1.0	2	5	4	4	5	0.07	0.4	0.99